### **Comparisons of Job Characteristics**

Focus Occupation: Zoologists and Wildlife Biologists (19-1023) Associated Occupation: Soil and Plant Scientists (19-1013)

Compare Knowledge Compare Skills Compare Abilities Compare Detailed Work Activities Compare Tools and Technologies

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

80

# Knowledge Similarity of Focus Occupation to Associated Occupation: Focus Occupation: Zoologists and Wildlife Biologists (19-1023) Associated Occupation: Soil and Plant Scientists (19-1013)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation	
Biology	3.7	18.5	21.8	>>	Current knowledge level is likely more than sufficient	
English Language	11.2	16.7	14.9	<	Expanded education and/or training may be required	
Chemistry	4.8	16.0	8.4	<<	Extensive education and/or training may be required	
Mathematics	9.2	16.0	12.4	<<	Extensive education and/or training may be required	
Food Production	2.1	13.1	3.6	<<	Extensive education and/or training may be required	
Geography	3.9	12.6	11.7	0	Current knowledge level may be sufficient	
Communications and Media	5.3	11.0	7.7	<<	Extensive education and/or training may be required	
Physics	4.3	10.0	3.9	<<	Extensive education and/or training may be required	

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

Skills	Similarity of	Similarity of Focus Occupation to Associated Occupation: 91			
Focus Occupation: Zoologists and Wildlife Biologists (19-1023) Associated Occupation: Soil and Plant Scientists (19-1013)					
Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Science	4.5	16.0	13.6	<	A higher skill level may be required
Reading Comprehension	10.7	15.2	14.6	0	Current skill level may be sufficient
Speaking	10.8	14.8	12.2	<	A higher skill level may be required

Judgment and Decision Making	9.4	13.8	11.5	<	A higher skill level may be required
Complex Problem Solving	9.1	12.8	10.8	<	A higher skill level may be required
Systems Analysis	6.5	11.8	10.2	<	A higher skill level may be required
Systems Evaluation	6.4	11.1	9.4	<	A higher skill level may be required
Mathematics	6.2	10.6	8.3	<	A higher skill level may be required
Operations Analysis	5.0	9.4	2.8	<<	Extensive development of skills in this area may be required
Programming	2.2	5.1	2.2	<<	Extensive development of skills in this area may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

#### **Abilities**

Similarity of Focus Occupation to Associated Occupation: 93

Focus Occupation: Zoologists and Wildlife Biologists (19-1023) Associated Occupation: Soil and Plant Scientists (19-1013)

Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation	
Inductive Reasoning	10.2	15.1	12.6	<	Some improvement in abilities may be required	
Deductive Reasoning	10.6	14.7	12.3	<	Some improvement in abilities may be required	
Speech Clarity	10.2	13.8	10.8	<<	Extensive improvement in abilities may be required	
Originality	7.6	13.7	9.2	<<	Extensive improvement in abilities may be required	
Category Flexibility	9.0	13.3	11.0	<	Some improvement in abilities may be required	
Information Ordering	9.9	12.3	11.4	0	Current ability level may be sufficient	
Fluency of Ideas	7.6	12.2	9.0	<<	Extensive improvement in abilities may be required	
Far Vision	7.8	11.2	8.1	<<	Extensive improvement in abilities may be required	
Number Facility	6.3	10.7	8.5	<	Some improvement in abilities may be required	

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## **Activities that Both Occupations Have in Common**

Similarity of Focus
Occupation to Associated
Occupation: 93

Focus Occupation: Zoologists and Wildlife Biologists (19-1023) Associated Occupation: Soil and Plant Scientists (19-1013)

Work Activities	Exclusivity of Activity
Adhere to safety procedures	12

Advise clients or customers	19
Advise governmental or industrial personnel	28
Analyze biological research, test, or analysis data	70
Analyze scientific research data or investigative findings	27
Breed animals to propagate stock or to develop new types	87
Classify plants, animals, or other natural phenomena	69
Collect scientific or technical data	30
Collect statistical data	47
Communicate technical information	4
Conduct analyses or tests of organic compounds	71
Conduct field research or investigative studies	52
Conduct laboratory research or experiments	57
Conduct standardized qualitative laboratory analyses	62
Conduct standardized quantitative laboratory analyses	62
Confer with research personnel	50
Confer with scientists	54
Develop new products based on scientific research results	71
Develop or maintain databases	30
Develop plans for programs or projects	31
Develop policies, procedures, methods, or standards	21
Develop scientific or mathematical hypotheses, theories, or laws	62
Develop tables depicting data	33
Direct and coordinate scientific research or investigative studies	27
Direct implementation of new procedures, policies, or programs	60
Examine biological or other material specimens under microscope	73
Explain complex mathematical information	30
Follow microbiology procedures	74
Identify insect characteristics	95
Make decisions	24
Make presentations	13
Perform statistical analysis	71
Plan scientific research or investigative studies	48
Prepare biological specimens for examination	84
Prepare reports	8
Prepare technical reports or related documentation	22
Read maps	42
Recommend further study or action based on research data	60
Record test results, test procedures, or inspection data	48
Resolve engineering or science problems	46
Use biological research techniques	68
Use biological testing instruments	73
Use chemical testing or analysis procedures	54
Use computers to enter, access or retrieve data	3
Use knowledge of investigation techniques	16
Use laboratory equipment	60
Use library or online Internet research techniques	21
Use mathematical or statistical methods to identify or analyze problems	30
Use microscope	71

Use quantitative research methods	35
Use relational database software	26
Use scientific research methodology	21
Use spreadsheet software	18
Use word processing or desktop publishing software	17
Write business project or bid proposals	48
Write research or project grant proposals	33
Write scholarly or technical research papers	36

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## **Tools and Technologies that Both Occupations Have in Common**

Similarity of Focus
Occupation to Associated
Occupation: 66

Focus Occupation: Zoologists and Wildlife Biologists (19-1023) Associated Occupation: Soil and Plant Scientists (19-1013)

Tools and Technologies	Exclusivity
Audio and visual equipment	4
Business function specific software	1
Cameras	2
Chemical evaluation instruments and supplies	10
Computer data input devices	2
Computers	1
Content authoring and editing software	1
Data management and query software	1
Electrochemical measuring instruments and accessories	9
Gas analyzers and monitors	10
General laboratory glassware and plasticware and supplies	13
Industry specific software	1
Information exchange software	1
Laboratory centrifuges and accessories	13
Laboratory enclosures and accessories	17
Laboratory incubating equipment	20
Laboratory ovens and accessories	15
Laboratory sieves and sifting equipment and supplies	27
Light and wave generating and measuring equipment	4
Sampling equipment	12
Spectroscopic equipment	10
Temperature and heat measuring instruments	6
Viewing and observing instruments and accessories	4
Weight measuring instruments	7

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.